MODIS TECHNICAL TEAM MEETING

October 28, 1999

Vince Salomonson chaired the MODIS Technical Team Meeting. Present were Ken Anderson, Bill Barnes, Francesco Bordi, Wayne Esaias, Al Fleig, Chris Justice (via telecon), Steve Kempler, Gene Legg (NOAA), Ed Masuoka, Harry Montgomery, Bob Murphy, and Dan Tarpley (NOAA), with Deborah Howard recording the minutes.

1.0 SCHEDULE OF EVENTS

Mini-SWAMP Meeting GSFC	November 8, 1999, 1:30 p.m. Building 16W, Room N76/N80
MODIS PI Processing Meeting Building 33, Room H114	Monday, November 15, 1999 9:30 a.m.
MODIS Science Team Meeting The Sheraton Columbia Hotel Columbia, MD	November 16–17, 1999 8:30 a.m.
Terra Launch Vandenberg Air Force Base Lompoc, CA	No earlier than December 1999
AGU 1999 Fall Meeting San Francisco, CA	December 13–17, 1999
IGARSS 2000 Abstracts Due	December 28, 1999
EOS-IWG Tucson, AZ	April 11–13, 2000
AGU 2000 Spring Meeting Washington, DC	May 30–June 3, 2000
IGARSS 2000 Honolulu, HI	July 24–28, 2000
EOS-PM Launch	December 21, 2000

2.0 MINUTES OF THE MEETING

2.1 Instrument Report

Anderson reported that the testing required for pre-shipment was just about done and would be completed by next week. Barnes asked how long it would take for a temperature scan of the other focal plane. Anderson said they were

planning to look at the FM-2 focal plane (it was used during troubleshooting of cross-talk) and monitor aliveness at different temperatures during cooldown. This could be done in a few weeks. Barnes noted that 11 channels (out of 20) in Band 6 appear to be defective according to SBRS.

2.2 MODIS Level 1 Integration

Bordi reported on MODIS Level 1 Integration Summary Status (see Attachment 1). He said that Level 1B (PGE02), version 2.2.0, has been promoted to Ops at the DAAC. Delivery of L1B, version 2.3.0 is anticipated by December 1, 1999. Cloud mask (PGE03), version 2.4.3, is in testing and expected to promote to Ops by the end of October. The L1A subsetter (PGE71) is in the DAAC and the SDST patch (2.0.2) was received mid-October. It is expected to promote to Ops by November 15. Masuoka commented that there is a new version of PGE71 coming in mid-November that will produce smaller night granules. Until that shows up it is prudent to go ahead with the SSI&T of the current version of PGE71 to insure that any incompatibilities with the ECS environment are identified early. When the new version is delivered to the GSFC DAAC it will go through SSI&T before first data are received from MODIS.

Bordi stated that many L1 integration issues are closed. Issue #1.3, "unable to delete Data Processing Requests (DPR's)," that was previously resolved was reopened as a separate issue, #7, because the DAAC was unable to delete DPR's in a full-up test. Issue #4, regarding a different production profile needed for L1A PGE, needs ESDIS to work on it related to the partially filled scan line.

Fleig asked when products would be ready for release. He said that early post-launch science processing and a realistic schedule for first products, calibration, and public distribution, is a topic at the upcoming Mini-SWAMP meeting on November 8th.

Bordi said that issue #5, about a PGE versioning approach for keeping GDAAC and SDST version changes parallel, is closed. SDST and the GDAAC agreed to use the current SDST PGE versioning approach. Issue #6 is closed, it was agreed that the old version of L1 data sets would be deleted from the archive when new versions are used, rather than keeping multiple copies. Issue #8, regarding the expected electronic distribution of MODIS products, is closed per Murphy. LATIS (CERES) expects to receive data on tape rather than electronically. LATIS would have required about 25% of data volume if data were distributed electronically to them. Esaias commented that this would imply that L1 subscription capacity is fully subscribed. Kempler said it is close to being fully subscribed; they are working to alleviate that. More bandwidth (of data out of the GDAAC) will be available in about a year.

2.3 GDAAC

The discussion on MODIS data distribution continued. Initially, 90% of the data would be distributed to the Science Team and 10% to the public. After a transition period of about a year, 90% would be available to the public. Kempler and Masuoka took an action to come up with agreed upon volume for MODIS Q/A data distribution and present it at an upcoming Technical Team meeting.

Kempler briefly reviewed the GDAAC Notes for MODIS Technical Team Meeting dated 10/28/99 (see Attachment 2). Highlights from the week include that patches for PGE71 and PGE03 have been received and an SSI&T is in progress. MOSS-3 was still a manual process. However, performance testing indicates that the DAAC was keeping up with 48 hours of data in 48 hours (clock time). During a 1-week test, the DAAC ingested all data from EDOS, all Level 1 products went to MODAPS, and then ingested the Level 2 and Level 3 science products produced by MODAPS. Justice asked whether there was still any conflict between production and distribution. Kempler replied no, that the multi-threaded ftp patch removed the bottleneck, which had caused a conflict between production and product distribution.

2.4 SDST

Kempler and Masuoka said they would work out a schedule for the joint testing of MODAPS with the GSFC DAAC. Masuoka commented that at least 4-5 days of production at a time would be desirable to test joint production of MODIS products by the two systems (GDAAC and MODAPS).

Masuoka said the Operations Agreements (OA's) between MODAPS and the NSIDC and EDC DAAC's were signed and are baselined. The GSFC DAAC is adding to an OA provided by SDST for their review.

Masuoka briefly reviewed the Launch Ready PGE Status dated 10/28/99 (Attachment 3). There were not too many changes. About 16 PGE's need small metadata errors fixed that are being worked. Masuoka noted that in MOSS-3 (the end-to-end ground system test) the Cloud Mask ran slowly at the GDAAC. The ECS contractor has identified the problem with help from Rich Hucek and is working on a fix.

Fleig showed the group an image that included how missing data from the 11 defective detectors in Band 6 would effect data images. With these defective channels, we would miss about 25% of the data from a prime scan in the continental United States. Channels 3, 6, 10, 12, 13, 14, and 15 in Band 6 are working. Band 6 does affect Cloud Mask and that would affect other products in turn. The cloud products are affected and Cloud Mask is affected. Band 6 does not enter into Oceans products at launch. It affects Snow most directly and some of the cloud parameters. When there is Cloud Mask, snow could not be seen. During the growing season, however, it is not necessary to discriminate snow from Cloud Mask. Also, Band 6 is not absolutely critical for Land products. Salomonson said that eventually a science impact statement would have to be provided to the PM Project.

Fleig also reported that now we can reliably invert version 2.2.0 of the Level 1B product, the at-launch version.

2.5 Oceans

Esaias reported that the Melville cruise is over and was successful with high chlorophyll concentrations at many of the 20 stations.

2.6 NOAA
Legg commented that NOAA received a lot of data from MODAPS recently.

2.7 MAST
Justice and Howard are coordinating possible changes to the MODIS Science Team, Land Group breakout meeting schedule and location. The Land Discipline Group breakout meeting may take place at GSFC rather than at the Science Team Meeting site in Columbia, MD.

2.8 Terra Launch
The group briefly discussed the Terra Launch. A launch date between December 13 to 17 is possible. (The Shuttle is scheduled for December 3–12.) We will probably have a more definite date in about a week.

3.0 ACTION ITEMS

3.1 New Action Items
1. Kempler and Masuoka: Present to the Technical Team an agreed upon volume for MODIS Q/A data distribution.

3.2 Action Items Carried Forward
1. King: Identify an Atmospheres representative to the NOAA Product Oversight Panels.

Status: This item remains open.

2. Hohner, Fleig, and Masuoka: Include a space for MODIS early images on the MODIS home Web site. After launch, it would include downloadable early images on the MODIS site and a link to the DAAC's for obtaining products and data. The TRMM and SeaWiFS Web pages and how they process and present images can be used as good examples.

Status: This item remains open.

3. Legg: Find out when and how NASA MODIS representatives will be integrated into the NOAA review process and report on status to the MODIS Technical Team. NOAA has agreed to have MODIS representatives serve on the NESDIS data product review boards (Product Oversight Panel). However, MODIS representatives have not yet been invited to participate in an advisory panel.

Status: This item remains open. At the October 20 MODIS Technical Team meeting, Dan Tarpley suggested asking Eric Vermote to represent the Land group, and asked Oceans and Atmosphere groups to suggest representatives. Esaias volunteered to represent Oceans. King will follow up to find someone to represent the Atmosphere group (see Action Items Carried Forward, #1, above).

4. Hohner and Howard: Develop a weekly MODIS news page linked to the

MODIS home Web site. It should include hot items and reflect weekly progress.

Status: This item is in progress.

5. Masuoka: Submit an EOS-PM Data Product Update to ESDIS.

Status: This action item remains open.